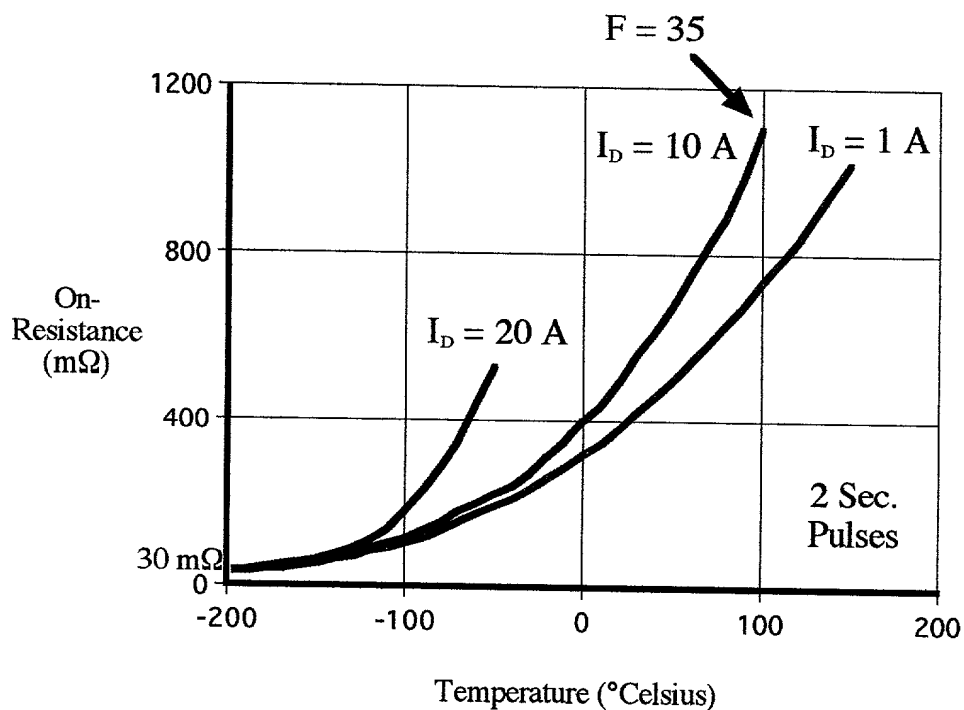


On-Resistance ( $R_{ON}$ ) vs. Drain Current ( $I_D$ )

APT 10026JN - 1000 V, 33 A, 0.26  $\Omega$ ,

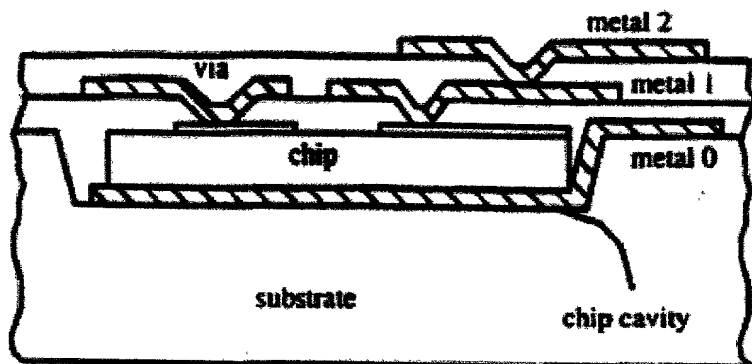
FIGURE 1



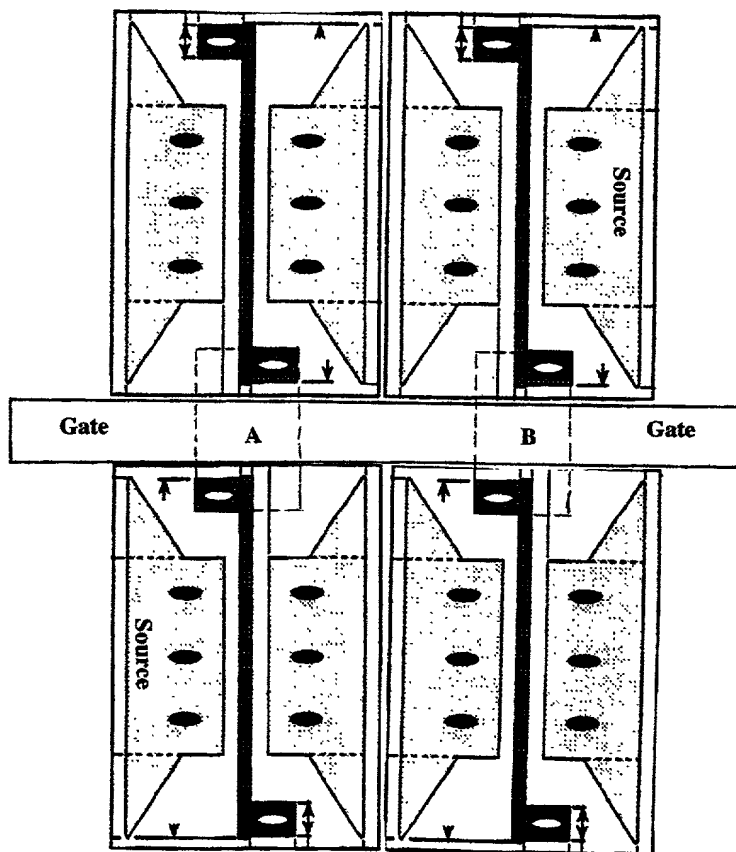
On-Resistance vs. Temperature

APT 10053 LNR

FIGURE 2



High-Density Interconnect (HDI) Technology  
FIGURE 3



The Cryo-Super-Chip  
FIGURE 4

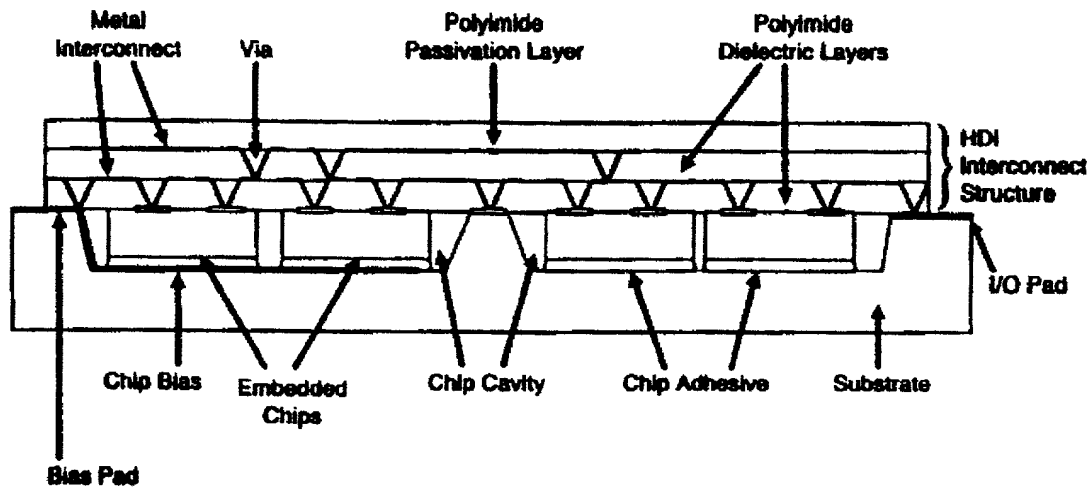
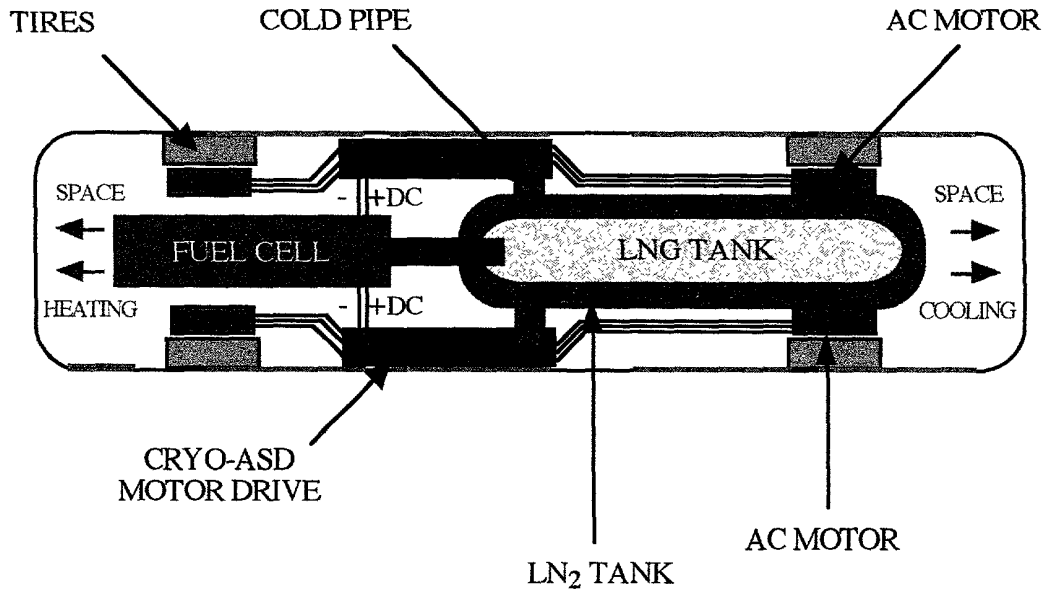
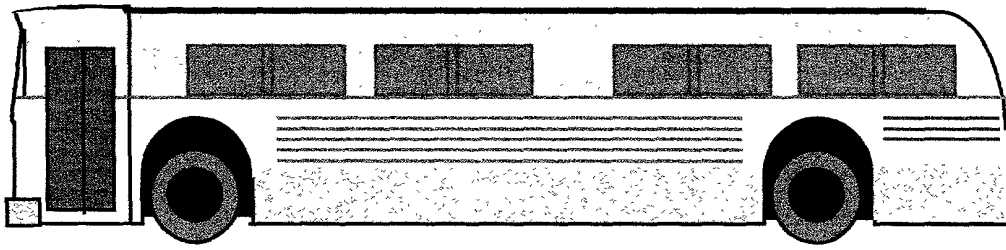


Fig. 1. Embedded chip HDI MCM technology cross-section.

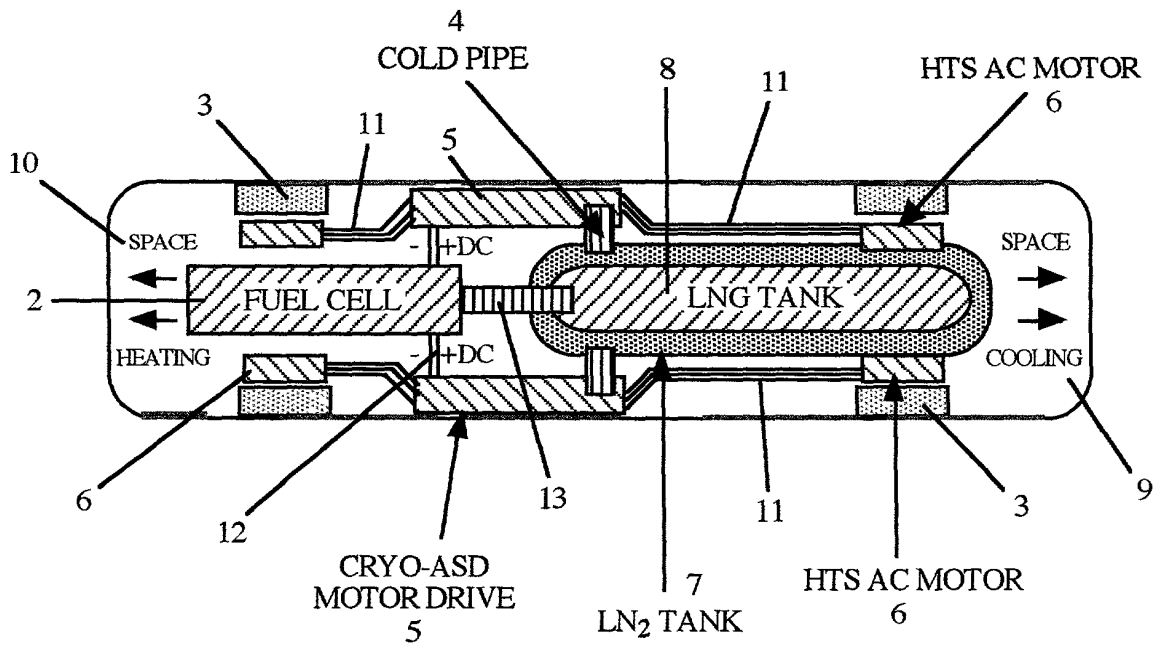
FIGURE 5



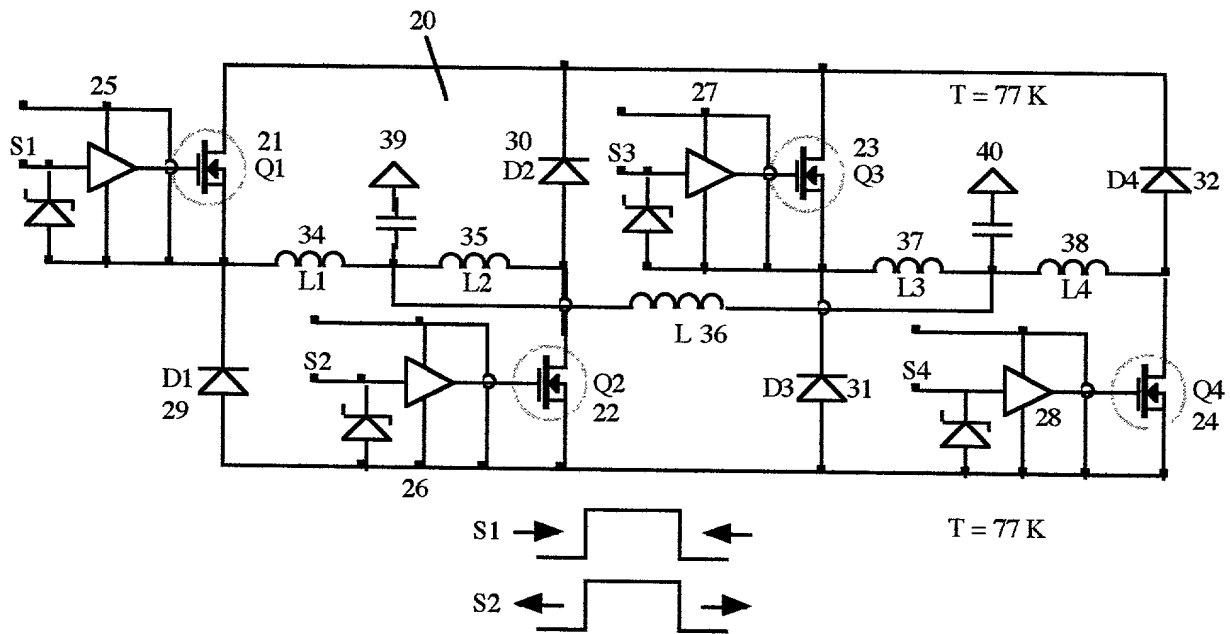
**THE CRYO-ASD MOTOR DRIVE  
SIDE AND TOP VIEWS**

**Figure 6**

# THE CRYO-BUS



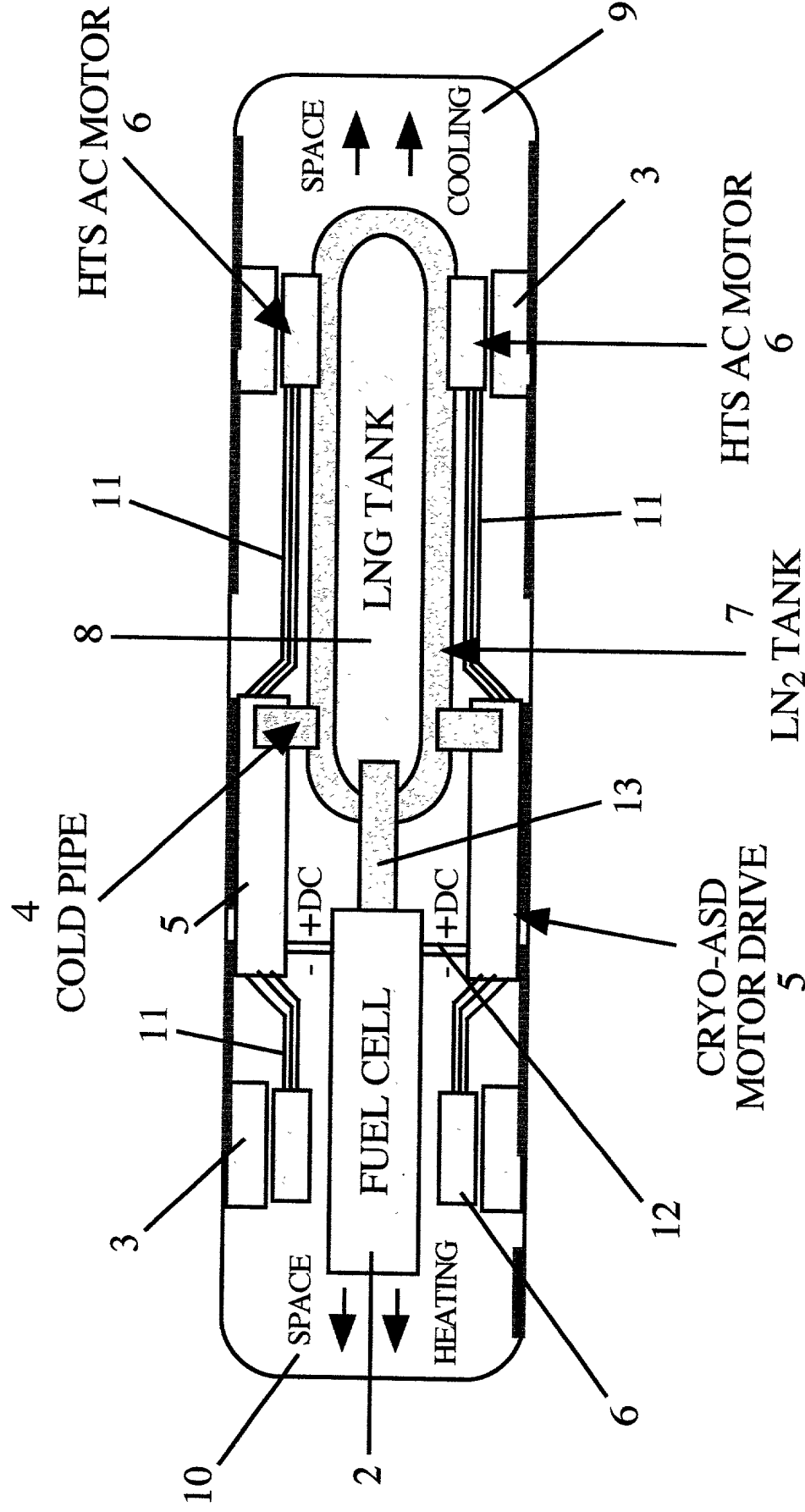
**THE CRYO-ASD MOTOR DRIVE**  
**Figure 7**



**The Stanley-Topology (S-Topology)**  
**Full-Bridge Circuit Using 2 Opposed Current (OC) Half-Bridges**

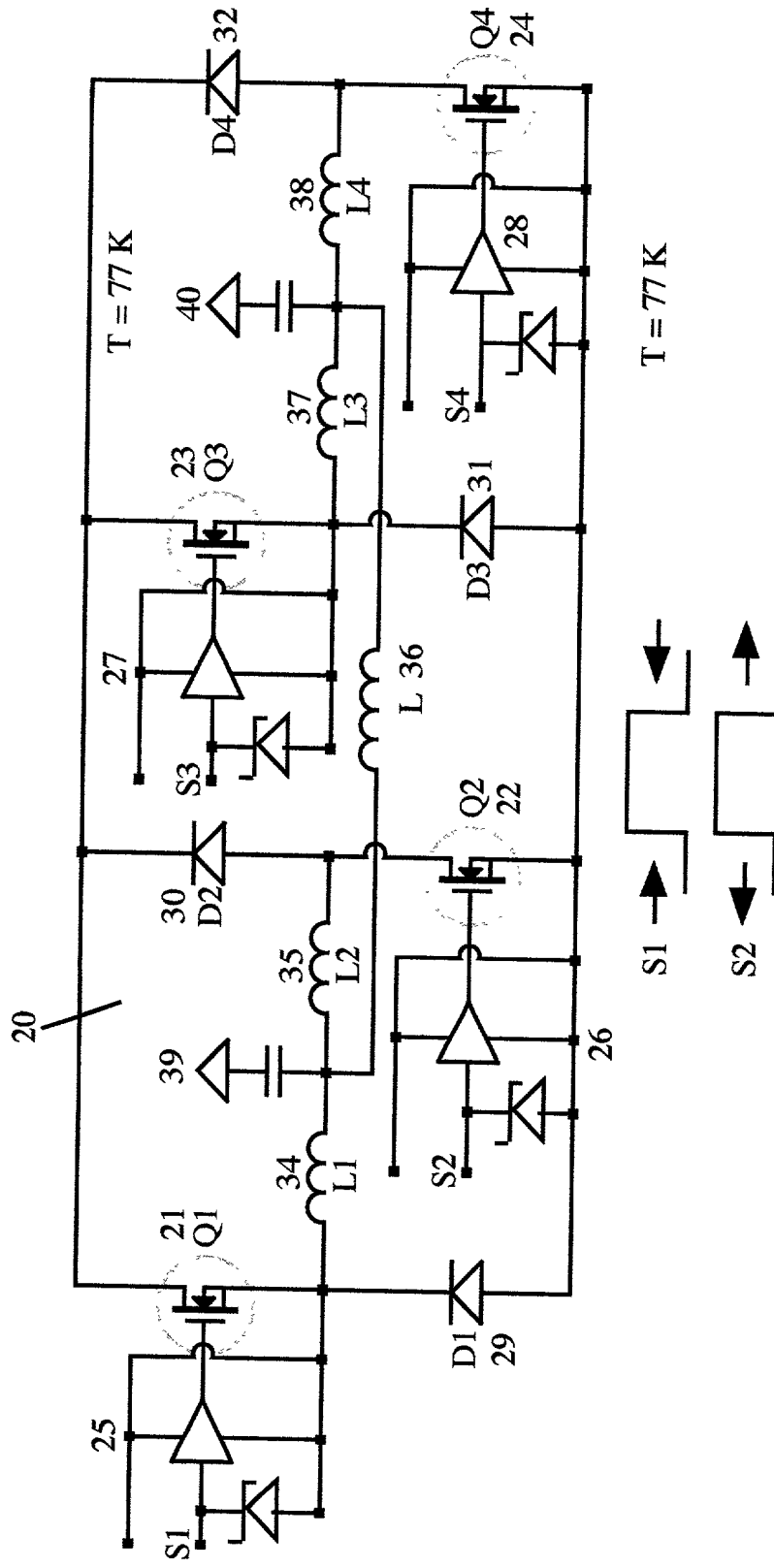
**Figure 8**

# THE CRYO-BUS



## THE CRYO-ASD MOTOR DRIVE

Figure 7



**The Stanley-Topology (S-Topology)  
Full-Bridge Circuit Using 2 Opposed Current (OC) Half-Bridges**

**Figure 8**